APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/527,313	03/16/2000	Michael E. Pietraszak	14531.57.1	2247

22913   7590   02/27/2003

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EXAMINER
SLOAN, NATHAN A

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 02/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)	
	09/527,313		PIETRASZAK ET AL.	
Office Action Summary	Examiner		Art Unit	
	Nathan A Sloan		2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _16 March 2000_ .

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-44_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-44_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _3,4,7_ .   6) ☐ Other: .

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities: page 21, line 18

contains a reference to a U.S. Patent Application but is missing the serial number.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-28, 30, and 34-42 are rejected under 35 U.S.C. 102(e) as being anticipated by

Usui et al. (6,075,5670).

Usui et al. teach a system and method for combining EPG data received from multiple

sources into a single EPG.

With respect to claims 1, 4, 41, and 42, the claimed method for compiling EPG data from multiple sources is met as seen in Figure 2 with multiple receiving units receiving signals from a variety of sources. As taught in column 8, lines 25-46, EPG data is received in a variety of formats and converted to a common format as claimed. Commands to process and format data are stored in EEPROM unit 206, taught in column 8, lines 46-50, meeting the claimed computer readable medium carrying computer executable instructions. The claimed writer module is met by controller 204 of Figure 2, which collects EPG data from the various receiving equipment, claimed loaders, and converts using translator 206 to store the data in common format. This process is best understood with reference to Figure 8, which shows a request to receive the EPG signal at step S32, followed by conversion to a predetermined format as step S33, followed by storing the converted data at step S34. The claimed "scaling, by the writer module, the EPG data according to factors provided by a user" is seen in Figure 7 at steps S23-S24, and taught in column 9, lines 10-44. Users are allowed to request storage conditions, such as storing data only related to a predetermined category, name, broadcast time, or other factors. Controller 204 then uses the conditions to selectively format and store EPG data in RAM unit 207, also seen in Figure 2, relating to the user request, meeting the claimed "writing at least a portion of the scaled EPG data to a storage associated with the device."

With respect to claim 2, the claimed writer module implementing "conflict resolution for the one or more loader modules" is taught in column 11, lines 14-35 with comparing broadcast names and programs from sources to determine if the programs need to be preserved as different pieces of information, or if they are the same.

With respect to claim 3, the claimed loader modules following a priority scheme is taught by Usui et al. with a step of making a selection as to which receiving equipment to select, seen in Figure 7 step S21. As seen in Figure 6, a user may select the EPG category to be received and displayed using equipment button 244 meeting the claimed "priority scheme." This then causes controller 204 to make a selection for receiving, integrating, and displaying EPG data utilizing the processes seen in Figures 7 and 8.

With respect to claims 5 and 6, the claimed scaling EPG data according to at least one of "time, language, richness, channels, and services" is taught by Usui as noted above by scaling EPG data to be stored based on user conditions. In column 9, lines 10-20 these conditions are taught to include program names or services, broadcast times, and broadcast channels as claimed. The claimed factor including language is taught in column 6, lines 66-67 and column 7, line 1. As noted above, these factors then determine which EPG data to store, taught in column 9, lines 22-40 with storing EPG data according to user defined factors in RAM unit 207.

With respect to claims 7 and 8, the claimed "limiting the amount of the EPG data that may be placed in the storage" is taught by managing memory associated with RAM 207. As taught in column 11, lines 43-51 EPG data may be deleted once viewed, meeting the claimed "removing expired EPG data from storage." The amount of memory contained in RAM 207 is inherently limited, and by managing memory resources, including deleting old data, to efficiently store EPG data the limiting of data to be stored in RAM 207 memory is taught.

With respect to claim 9, the claimed "keeping the last EPG data stored to a particular portion of the storage" is met by keeping a history of EPG reception, taught in column , lines 59-

63. This includes keeping the last information of EPG data stored when the power is turned off

so the channel may be received again when power is turned back on.

With respect to claim 10, the claimed "storage is a database" is taught in column 10, lines

66-67 and column 11, lines 1-2.

With respect to claim 11, the claimed accessing EPG data stored by a controller for one

one or more applications is met by controller 204 accessing EPG data for display, seen in Figure

11 at steps S81-S83.

With respect to claim 12, Usui teaches recording EPG data as noted above, teaches that

input video signals are digital as claimed, and in column 15, lines 46-49 the recording of digital

programming represented by EPG data using a VCR is taught.

With respect to claims 13 and 15, the claimed method for compiling EPG data from

multiple sources is met as seen in Figure 2 with multiple receiving units receiving signals from a

variety of sources. These receiving units are installed for each of the EPG sources to be

received, taught in column 17, lines 4-22. As taught in column 8, lines 25-46, EPG data is

received in a variety of formats and converted to a common format as claimed. The claimed

writer module is met by controller 204 of Figure 2, which collects EPG data from the various

receiving equipment, claimed loaders, and converts using translator 206 to store the data in

common format. This process is best understood with reference to Figure 8, which shows a

request to receive the EPG signal at step S32, followed by conversion to a predetermined format

as step S33, followed by storing the converted data at step S34. The claimed "processing the

EPG data received from the multiple EPG data sources according to factors provided by a user"

is seen in Figure 7 at steps S23-S24, and taught in column 9, lines 10-44. Users are allowed to

request storage conditions, such as storing data only related to a predetermined category. Controller 204 then uses the conditions to selectively format and store EPG data in RAM unit 207, also seen in Figure 2, relating to the user request, meeting the claimed "writing at least a portion of the scaled EPG data to a storage associated with the device."

With respect to claim 14, the claimed writer module implementing "conflict resolution for the one or more loader modules" is taught in column 11, lines 23-35 with comparing broadcast names and programs from sources to determine if the programs need to be preserved as different pieces of information, or if they are the same.

With respect to claims 16-18, the claimed scaling EPG data according to at least one of "time, language, richness, channels, and services" is taught by Usui as noted above by scaling EPG data to be stored based on user conditions. In column 9, lines 10-20 these conditions are taught to include program names or services, broadcast times, and broadcast channels as claimed. The claimed factor including language is taught in column 6, lines 66-67 and column 7, line 1. As noted above, these factors then determine which EPG data to store, taught in column 9, lines 22-40 with storing EPG data according to user defined factors in RAM unit 207.

With respect to claims 19 and 20, the claimed "EPG loader module is capable of being added to the device and removed from the device" is inherent to the invention. Clearly the receivers may be added to the device to form Usui's invention. As taught in column 17, lines 4-16 a plurality of devices may be added to the system as claimed to receive EPG data as seen in Figure 22. It is inherent that these devices may also be removed and the invention function the same way because they are merely additional sources of information and not essential to the execution of controller 204 storing EPG data in memory.

With respect to claim 21 and 22, the claimed "limiting the amount of the EPG data that may be placed in the storage" is taught by managing memory associated with RAM 207. As taught in column 11, lines 43-51 EPG data may be deleted once viewed, meeting the claimed "removing expired EPG data from storage." The amount of memory contained in RAM 207 is inherently limited, and by managing memory resources, including deleting old data, to efficiently store EPG data the limiting of data to be stored in RAM 207 memory is taught.

With respect to claim 23, the claimed "storing the last EPG data stored to a particular portion of the storage" is met by keeping a history of EPG reception, taught in column , lines 59-63. This includes keeping the last information of EPG data stored when the power is turned off so the channel may be received again when power is turned back on.

With respect to claim 24, the claimed "storage is a database" is taught in column 10, lines 66-67 and column 11, lines 1-2.

With respect to claim 25, the claimed accessing EPG data stored by a controller for one or more applications is met by controller 204 accessing EPG data for display, seen in Figure 11 at steps S81-S83.

With respect to claim 26, Usui teaches recording EPG data as noted above, teaches that input video signals are digital as claimed, and in column 15, lines 46-49 the recording of digital programming represented by EPG data using a VCR is taught.

With respect to claim 27, the claimed receiving EPG data from one or more sources including a digital recording is met by Usui with storing EPG data from multiple sources and input programming being digital recordings as claimed. This data is stored in a database within RAM 207 as noted above, and then read out in response to a user request, seen in Figure 9 step

S51 by controller 226 of Figure 5, claimed control module. This data is then provided to generating circuit 227 which generates the data for display, which shows an interactive application that allows the user to select items using a remote control seen in Figures 4 or 6.

With respect to claim 28, the claimed method for compiling EPG data from multiple sources is met as seen in Figure 2 with multiple receiving units receiving signals from a variety of sources. As taught in column 8, lines 25-46, EPG data is received in a variety of formats and converted to a common format as claimed. The claimed writer module is met by controller 204 of Figure 2, which collects EPG data from the various receiving equipment, claimed loaders, and converts using translator 206 to store the data in common format. This process is best understood with reference to Figure 8, which shows a request to receive the EPG signal at step S32, followed by conversion to a predetermined format as step S33, followed by storing the converted data at step S34. The claimed "scaling EPG data by the writer module" is seen in Figure 7 at steps S23-S24, and taught in column 9, lines 22-44. Users are allowed to request storage conditions, such as storing data only related to a predetermined category. Controller 204 then uses the conditions to selectively format and store EPG data in RAM unit 207, also seen in Figure 2, relating to the user request, meeting the claimed "writing at least a portion of the scaled EPG data to a storage associated with the device."

With respect to claim 30, the claimed accessing EPG data stored by a control module for one or more applications is met by controller 204 accessing EPG data for display, seen in Figure 11 at steps S81-S83.

With respect to claims 34-36, the claimed method for configuring EPG data from multiple sources is met as seen in Figure 2 with multiple receiving units receiving signals from a

variety of sources. As seen in Figure 7, step S21 receiving equipment is selected as claimed, which is taught in column 8, lines 25-35. The other pieces are selected after processing of the first receiving unit is complete, and are therefore in a "deselected" state as claimed. As taught in column 8, lines 25-46, EPG data is received in a variety of formats and converted to a common format as claimed. The claimed writer module is met by controller 204 of Figure 2, which collects EPG data from the various receiving equipment, claimed loaders, and converts using translator 206 to store the data in common format. This process is best understood with reference to Figure 8, which shows a request to receive the EPG signal at step S32, followed by conversion to a predetermined format as step S33, followed by storing the converted data at step S34. The claimed "scaling, by the writer module, the EPG data according to factors provided by a user" is seen in Figure 7 at steps S23-S24, and taught in column 9, lines 22-44. Users are allowed to request storage conditions, such as storing data only related to a predetermined category. Controller 204 then uses the conditions to selectively format and store EPG data in RAM unit 207, also seen in Figure 2, relating to the user request, meeting the claimed "writing at least a portion of the scaled EPG data to a storage associated with the device."

With respect to claims 37 and 38, the claimed scaling EPG data according to at least one of time, language, richness, channels, and services is taught by Usui as noted above by scaling EPG data to be stored based on user conditions. In column 9, lines 10-20 these conditions are taught to include program names or services, broadcast times, and broadcast channels as claimed. The claimed factor including language is taught in column 6, lines 66-67 and column 7, line 1. As noted above, these factors then determine which EPG data to store, taught in column 9, lines 22-40 with storing EPG data according to user defined factors in RAM unit 207.

With respect to claim 39, the claimed scaling by richness including identifying the amount of "data to be stored for at least one of categories of titles, descriptions, attributes, properties, reviews, ratings, channel, service, length, and other categories defined by a user" is taught by scaling EPG data to compare for same category such as sports games which are identical and therefore would have the same attributes, title, and description is taught in column 11, lines 14-35.

With respect to claim 40, the claimed "identifying at least one channel for inclusion in the EPG data" is met as noted above by storing EPG programming data. The claimed "identifying at least one channel as a favorite channel" is met by a user utilizing the favorite button 144 on a remote seen in Figure 4. The claimed identifying "at least one channel for exclusion from the EPG data" is met as noted above during conflict resolution, which identifies if the same program is broadcast over multiple mediums and only stores a single set of information to manage memory, thus excluding at least one channel.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim 32-33 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usui et al. (6,075,570).

With respect to claim 32, Usui does not teach creating an instance of the control module "for each of the one or more applications receiving EPG data from the database." Specifically, Usui teaches a single hardware device capable of controlling receiving and deliver of EPG data from a database in RAM 207. Examiner takes Official Notice that it is well known to create an instance of a control module to interface with applications, such as in programming languages using object-oriented architecture. It would have been obvious for one skilled in the art at the time of the invention to modify the methods taught by Usui by creating a control module for each interface using well known programming techniques in order to provide a flexible, re-programmable environment.

With respect to claim 33, Usui teaches updating contents of the EPG in column 9, lines 1-3, but not in response to "receiving a notification" as claimed. Examiner takes Official Notice that it is well known in the art to update an EPG in response to a notification of change. It would have been obvious for one skilled in the art at the time of the invention to modify the methods taught by Usui by updating EPG data in response to a notification in order to reduce the computing burden of continuously checking for new information.

With respect to claim 43-44, the claimed method for compiling EPG data from multiple sources is met as seen in Figure 2 with multiple receiving units receiving signals from a variety of sources. As noted above, the data is retrieved from a database in ROM 207 for display to viewers. As taught in column 8, lines 25-50, EPG data is received in a variety of formats and

converted to a common format using instructions stored on a computer readable medium as claimed. The claimed writer module is met by controller 204 of Figure 2, which collects EPG data from the various receiving equipment, claimed loaders, and converts using translator 206 to store the data in common format. This process is best understood with reference to Figure 8, which shows a request to receive the EPG signal at step S32, followed by conversion to a predetermined format as step S33, followed by storing the converted data at step S34. The claimed "scaling, by the writer module, the EPG data according to factors provided by a user" is seen in Figure 7 at steps S23-S24, and taught in column 9, lines 22-44. Users are allowed to request storage conditions, such as storing data only related to a predetermined category, name, broadcast time, or other factors. Controller 204 then uses the conditions to selectively format and store EPG data in RAM unit 207, also seen in Figure 2. This data is then read out in response to a user request, seen in Figure 9 step S51 by controller 226 of Figure 5, claimed control module. This data is then provided to generating circuit 227 which generates the data for display, which shows an interactive application that allows the user to select items using a remote control seen in Figures 4 or 6. Examiner takes Official Notice that it is well known to create an instance of a control and writer modules to control data processing functions, such as in programming languages using object-oriented architecture. It would have been obvious for one skilled in the art at the time of the invention to modify the methods taught by Usui by creating writer and control modules using well known programming techniques in order to provide a flexible, re-programmable environment.

6.   Claims 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usui et al. (6,075,570) and in view of Williams et al. (6,157,411).

Williams et al. teach a system and method for compiling EPG data from multiple sources.

Usui does not explicitly teach that the writer and control modules are an application

program interface capable of interfacing with the loader modules. Usui does teach that the

controller interfaces with receiving units to receive and format the data, but not explicitly that

they are an API. Williams et al. teach the use of an API in column 6, lines 15-25. It would have

been obvious for one skilled in the art at the time of the invention to include an API between the

receivers and controller of Usui in order to allow a standard interface for receiving and

processing data.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Harada et al. (6,246,442) teach a system and method used to display a broadcasting

program guide table where various levels of detail are provided in order to manage memory.

Durden et al. (6,442,756) teach an electronic program guide that displays various levels

of detail for information in future time periods.

Stinebruner (6,133,910) teach a video system utilizing a virtual tuner to provide EPG data

from multiple sources. Users may create a favorite list based on preferences to sort the data.

Lemmons et al. (5,880,768) teach an interactive program guide for storing information

and allowing a viewer to search selection criteria to sort the program guide.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A Sloan whose telephone number is (703)305-8143. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is (703)308-5399.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-3900.

JOHN MILLER
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